

What is claimed is:

1. A magnetic recording medium, comprising a magnetic layer containing at least a ferromagnetic powder and a binder resin on one surface of a non-magnetic support, wherein the thickness of the magnetic layer is within a range from 0.03 to 0.30 μm , and the number of concavities with a depth of 30 nm or greater in the surface of the magnetic layer is 5 per 1 cm^2 of surface area or less.

2. The magnetic recording medium according to claim 1, wherein the value of the average depth R_v6 of the surface of the magnetic layer, as measured by a contact type surface roughness meter, is 12 nm or less.

3. The magnetic recording medium according to claim 1, wherein the average major axis length of the ferromagnetic powder is 0.1 μm or less.

4. The magnetic recording medium according to any one of claims 1 to 3, wherein the medium is used in a recording and reproducing system in which the minimum recording wavelength is 0.6 μm or shorter.

5. A magnetic recording medium, comprising a lower non-magnetic layer containing at least a non-magnetic powder and a binder resin on one surface of a non-magnetic support, an upper magnetic layer containing at least a ferromagnetic powder and a binder resin on the lower non-magnetic layer, and a back coat layer on the other surface

of the non-magnetic support, wherein the thickness of the upper magnetic layer is within a range from 0.03 to 0.30 μm , and the number of concavities with a depth of 30 nm or greater in the surface of the upper magnetic layer is 5 per 1 cm^2 of surface area or less.

6. The magnetic recording medium according to claim 5, wherein the value of the average depth R_v6 of the surface of the magnetic layer, as measured by a contact type surface roughness meter, is 12 nm or less.

7. The magnetic recording medium according to claim 5, wherein the average major axis length of the ferromagnetic powder is 0.1 μm or less.

8. The magnetic recording medium according to any one of claims 5 to 7, wherein the medium is used in a recording and reproducing system in which the minimum recording wavelength is 0.6 μm or shorter.